

3 group consisting of Sobol point sequence, Halton point
4 sequence, Hammersley point sequence, hyperbolic-cross point
sequence and generalized Faure sequence.

1 7. A system for structuring a portfolio, comprising:

2 (i) means for calculating a number of potential-loss
3 function values at points in a domain of stochastic market
4 factors, the points being obtained from a low-discrepancy
5 deterministic sequence;

6 (ii) means for determining a cumulative distribution
7 function of the function values;

8 (iii) means for determining value at risk as one of
9 the function values corresponding to a specified level of
10 confidence; and

11 (iv) means for structuring the portfolio depending on
12 a comparison of the value at risk with a specified target
13 value.

1 8. The system according to claim 7, wherein the
2 means for determining the cumulative distribution function
3 comprises means for sorting the function values.

1 9. The system according to claim 7, wherein the
2 number of function values is predetermined.

1 10. The system according to claim 7, wherein the
2 means for calculating comprises means for determining the
3 number of function values.

1 12. The system according to claim 7, wherein the low-
2 discrepancy deterministic sequence is selected from the
3 group consisting of Sobol point sequence, Halton point
4 sequence, Hammersley point sequence, hyperbolic-cross point
5 sequence and generalized Faure sequence.

~~(i) calculating potential-loss function values at points in a domain of stochastic market factors, the points being obtained from a low-discrepancy deterministic sequence;~~

9 (iii) determining value at risk as one of the function
10 values corresponding to a specified level of confidence; and

1 14. The system according to claim 13, wherein, in
2 determining the cumulative distribution function, the
3 processor is instructed for sorting the function values.

1 15. The system according to claim 13, wherein the
2 number of function values is predetermined.

1 16. The system according to claim 13, wherein the
2 processor is instructed for determining the number of
3 function values.

1 17. The system according to claim 13, wherein, for
2 calculating, the processor is instructed for allocating
3 function evaluations among a plurality of sub-processors.

1 18. The system according to claim 13, wherein the
2 low-discrepancy deterministic sequence is selected from the
3 group consisting of Sobol point sequence, Halton point
4 sequence, Hammersley point sequence, hyperbolic-cross point
5 sequence and generalized Faure sequence.

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